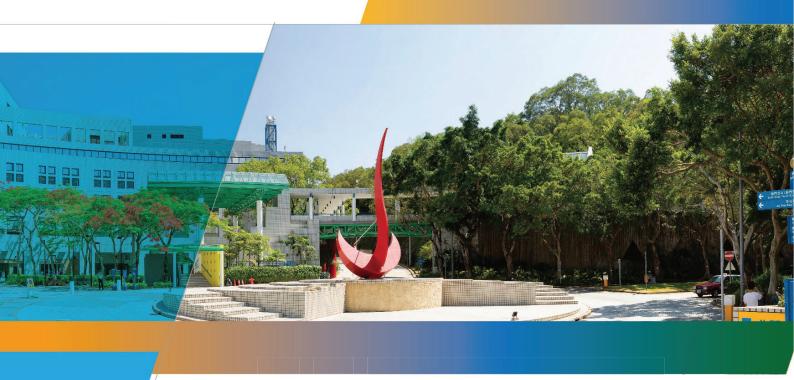




The 2nd HKB Annual Meeting International Conference on Marine Ecosystem and Resources



14-15 January 2022

Time: 9:00 am - 6:00 pm (GMT +8, HKT)

Venue: Via Zoom Meeting Platform

Co-organizer: Hong Kong Academy of Marine Science

and Engineering

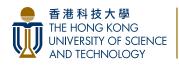
Registration 5:00 pm (GMT +8, HKT)

Deadline: 12 January 2022



Welcome for Registration

General Inquiry: hkb@ust.hk





Hong Kong Branch 2nd Annual Meeting International Conference on Marine Ecosystem and Resources Rundown

Date: 14-15 January 2022

Time: 9:00 am - 6:00 pm (GMT + 8, HK Time)

Venue: Via Zoom Meeting Platform

Co-organizer: Hong Kong Academy of Marine Science and Engineering

Day 1 Schedule

(14 January 2022, GMT +8, HK Time)

Morning Session

Session Chair: Prof. Pei-Yuan Qian

MC: Dr. Ting Xu

Zoom link:

https://hkust.zoom.us/meeting/register/tJ0oce6pqzItEtOVKQxbR-zoXBc_QKLMp7S1

9:05-9:10 am	Opening	Prof. Pei-Yuan Qian
	Remarks	David von Hansemann Professor of Science; Head and Chair
		Professor, Department of Ocean Science, Hong Kong University of
		Science and Technology;
		Director, Hong Kong Branch of the Southern Marine Science and
		Engineering Guangdong Laboratory (Guangzhou)
9:10-9:40 am	Plenary	Prof. Si Zhang
	Talk	Director, Southern Marine Science and Engineering Guangdong
		Laboratory (Guangzhou)
9:40-10:00 am	Director's	Prof. Pei-Yuan Qian
	Report	David von Hansemann Professor of Science; Head and Chair
		Professor, Department of Ocean Science, Hong Kong University of
		Science and Technology;
		Director, Hong Kong Branch of the Southern Marine Science and
		Engineering Guangdong Laboratory (Guangzhou)
10:00-10:30 am	Group Phot	
10:30-11:00 am	Plenary	Title: Effect of warming on marine microbial food webs
	Talk	Prof. Hongbin Liu
		Associate Head and Chair Professor, Department of Ocean Science;
		Professor, Division of Life Science, Hong Kong University of
		Science and Technology
11:00-11:30 am	Plenary	Title: From Organisms to Single Cells: Seeing Metals in Action in
	Talk	the Real Waters
		Prof. Wen-Xiong Wang
		Chair Professor, School of Energy and Environment,
		City University of Hong Kong





11:30 am-12:00 pm	Plenary	Title: Complex interactions among a deep-sea mussel and its endo-
	Talk	and episymbionts
		Prof. Jianwen Qiu
		Professor, Department of Biology, Hong Kong Baptist University
12:00-1:00 pm	n Lunch break	
Afternoon Parallel Sessions		
1:00 pm onwards	Area 3 and A	Area 4

Day 1 Schedule (14 January 2022, GMT +8, HK Time)

Afternoon Parallel Sessions

Invited Talks for Cold seep biodiversity, functioning, and genomics

Session Chairs: Prof. Jianwen Qiu & Prof. Jinping Cheng

Zoom link:

https://hkust.zoom.us/meeting/register/tJMsdu2prTouGtGm6HoGzKBdA_L11I9RNLAZ

1:00-1:20 pm	Task Leader Briefing
	Prof. Jianwen Qiu (Area 3 Task Leader)
1:20-1:40 pm	Title: Modscaf: a package to scaffold the ONT contigs with DNA
	modification information
	Prof. Runsheng Li
1:40-2:00 pm	Title: Impact of mutations in CRISPR Cas9
	Prof. Haibin Su
2:00-2:20 pm	Title: An insight into the microstructures and composition of deep-sea limpet
	shells
	Dr. Zhehan Ying
	(PI: Prof. Ning Wang)
2:20-2:40 pm	Title: Biodiversity, Symbiosis and Genomics of Deep-Sea Chemosynthetic
	Ecosystems
	Dr. Yi Lan
	(PI: Prof. Pei-Yuan Qian)
2:40-3:00 pm	Title: Evolution of decapod-microbe symbiosis
	Prof. Ling Ming Tsang
3:00-3:15 pm	Break
3:15-3:35 pm	Title: Evolution of novel adaptations in deep sea methane seeps
	Prof. Julia Sigwart
3:35-3:55 pm	Title: Decoding the largest crustacean genome – a deep-sea shrimp
	Alvinocaris longirostris
	Prof. Jerome Ho Lam Hui
3:55-4:15 pm	Title: Deciphering high resolution microbiome using combination of 2nd and
	3rd generation sequencing approaches
	Prof. Sheng Chen
4:15-4:35 pm	Title: Progress on co-estimating an evolutionary timeline of deep-sea animals
	and their symbionts based on mitochondrial endosymbiosis
	Dr. Sishuo Wang
	(PI: Prof. Haiwei Luo)
4:35 pm onwards	Area 3 Group Discussion



Day 1 Schedule (14 January 2022, GMT +8, HK Time)

Afternoon Parallel Sessions

Invited Talks for New technology for mining biological and microbiological resources in the South China Sea

Session Chairs: Prof. Philip Yongxin Li & Dr. Rong Ni

Zoom link:

https://hkust.zoom.us/meeting/register/tJwlceGpqTkoHNTcTJgcIaf o1t-crhcY3O-

Title: Omics-guided and synthetic biology-enabled discovery of bioactive natural
products from marine microbes
Prof. Philip Yongxin Li (Area 4 Task Leader)
Fitle: Genome mining and biosynthesis of bioactive marine natural products
Prof. Bradley Moore
Title: New diterpenoid discovery via precursor labeling and biotransformation
Nick Zill
PI: Prof. Wenjun Zhang)
Title: Total Synthesis of Maltepolide E and Congeners from Myxobacteria
Prof. Wei-Min Dai
Fitle: Lasso peptide biosynthesis: a structural approach
Prof. Zhihong Guo
Title: Novel inhibitors and activators of TRPV1 channel from marine natural
products
Prof. Pingbo Huang
Break
Fitle: Identification of marine bacterial-derived compounds with neurite growth-
promoting activities
Mr. Leung Ting Chan
PI: Prof. Kai Liu)
Fitle: Collective total syntheses of bioactive marine natural product lepadins
Prof. Rongbiao Tong
Title: Microcrystals and MicroED for Marine Natural Products
Prof. Ian D. Williams
Fitle: NMR-based Screening of Marine Natural Products to Target G-
quadruplexes for Anti-ALS and Anti-AIDS Drug Discovery
Prof. Guang Zhu
Fitle: Multi-omics guided Natural Products Discovery from Marine
Microorganisms
Or. Jianwei Tang
PI: Prof. Pei-Yuan Qian)
Fitle: A waste upcycling loop: Two-factor adaptive evolution of microalgae to
ncrease polyunsaturated fatty acid production using food waste
Mr. Zubeen Hathi
PI: Prof. Carol Sze Ki Lin)



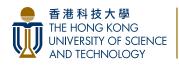
Day 2 Schedule (15 January 2022, GMT +8, HK Time)

Parallel Sessions

Invited Talks for Response mechanism of ecosystem and life processes to environmental changes in the South China Sea (including the Greater Bay Area) Session Chairs: Prof. Hongbin Liu & Dr. Rong Ni Zoom link:

https://hkust.zoom.us/meeting/register/tJwodOuprjstHNJVoWd1b ayoWyX12sdKprd

9:00-9:20 am	Task Leader Briefing
	Prof. Hongbin Liu (Area 1 Task Leader)
9:20-9:40 am	Title Plankton growth and grazing along an oligotrophic temperature gradient in
	the eastern Indian Ocean
	Prof. Michael Landry (Video)
9:40-10:00 am	Title: The impact of phage infection on the host's circadian rhythm and cell cycle
	Ms. Yaxin Liu
	(PI: Prof. Qinglu Zeng)
10:00-10:20 am	Title: Adaptation of cyanophages to phosphate limitation by regulating activity of
	phosphate-specific transporter of cyanobacteria host
	Prof. Shangyu Dang
10:20-10:40 am	Title: Characterization of Extracellular Vesicles Released from <i>Prochlorococcus</i>
	MED4
	Ms. Ziqing Peng
	(PI: Prof. Yusong Guo)
10:40-10:55 am	Break
10:55-11:15 am	Title: Collecting Biological Health Data of Local Cetaceans in Hong Kong
	Waters: Unmanned Aerial Vehicle Technology and Digital Photography (Phase
	2)
	Prof. Brian Chin Wing Kot
11:15-11:35 am	Title: Full-depth scalings for Isopycnal eddy mixing across continental slopes
	Mr. Huaiyu Wei
	(PI: Prof. Yan Wang)
11:35-11:55 am	Title: A high-quality genome assembly of the Japanese eel.
	Prof. Chris Kong Chu Wong
11:55 am-12:15 pm	Title: Single-cell analysis of a Deep-Sea Chemosymbiotic Clam
	Prof. Angela Ruohao Wu
12:15-1:25 pm	Lunch break
1:25-1:45 pm	Title: Environmental drivers of coral reef health across oceanic gradients
	Dr. Christina Skinner (Video)
	(PI: Prof. Alex S.J. Wyatt)
1:45-2:05 pm	Title: Explore marine viral diversity and reveal potential virus-host interactions
	in subtropical waters
	Prof. Charmaine Cheuk Man Yung
2:05-2:25 pm	Title: Environmental DNA metabarcoding for marine environmental monitoring





	Prof. Jinping Cheng
2:25-2:45 pm	Title: What strategies help stony corals <i>Platygyra carnosa</i> adapt to seasonal
	fluctuations?
	Ms. Haiying Ma
	(PI: Prof. Leo Lai Chan)
2:45-3:05 pm	Title: Sediment contributions to coastal biogeochemical cycles: preliminary data
	for the Pearl River Estuary
	Prof. Jiying Li
3:05-3:25 pm	Title: The macromolecular composition of phyto- and bacterio-plankton in-vitro
	and in-situ
	Dr. Daniel Sher
3:25-3:40 pm	Break
3:40-4:00 pm	Title: Decoding the three-way ecological interaction between epipelagic
	copepods, bacteria and their environment
	Mrs. Ximena Dubinsky-Velasquez
	(PI: Dr. Dalit Meron, Co-PI: Dr. Tamar Guy-Haim)
4:00-4:20 pm	Title: Metagenomic insights into the diversity of viruses infecting the smallest
	photosynthetic eukaryotes in the Hong-Kong Bay
	Prof. Gwenael Piganeau
4:20-4:40 pm	Title: Isoscape mapping for ecology and biogeochemistry
	Prof. Clive Trueman (Video)
4:40-5:00 pm	Title: Thermal diversity dampens community temperature sensitivity
	Prof. Bingzhang Chen
5:00-5:20 pm	Title: Seasonal variations in dissolved organic matter chemistry in eutrophic
	coastal bays in China: Implications for the carbon cycling
	Prof. Ding He
5:20 pm onwards	Area 1 Group Discussion

Day 2 Schedule (15 January 2022, GMT +8, HK Time)

Parallel Sessions

Invited Talks for Marine Environmental Pollution and Ecosafety in the Greater Bay Area and South China Sea

Session Chairs: Prof. Wen-Xiong Wang & Prof. Jinping Cheng

Zoom link:

 $\underline{https://hkust.zoom.us/meeting/register/tJItfuysqDwqE9DIIyyehfTCOzz62w3pDV2L}$

9:00-9:20 am	Task Leader Briefing	
	Prof. Wen-Xiong Wang (Area 2 Task Leader)	
9:20-9:40 am	Title: PCMX as an emerging environmental pollutant in the COVID pandemic	
	era	
	Mr. Chun-kit Au	
	(PI: Prof. Simon Wan Chan)	
9:40-10:00 am	Title: Ancestral exposure to benzo[a]pyrene induces transgenerational skeletal	
	deformities in fish: role of DNA methylation	
	Mr. Teng Wan	
	(PI: Prof. Richard Yuen Chong Kong)	



10:00-10:20 am	Title: In situ DGT sensing of bioavailable metal fluxes to improve toxicity
	predictions for sediments
	Dr. Minwei Xie
	(PI: Dr. Stuart Simpson)
10:20-10:40 am	Title: Emerging per- and polyfluoroalkyl substances (PFASs) in marine
	organisms: Pollution trend, non-target screening, and toxicokinetics
	Dr. Yuefei Phoebe Ruan
	(PI: Prof. Paul Kwan Sing Lam)
10:40-10:55 am	Break
10:55-11:15 am	Title: Anthropogenic impacts on coastal antibiotic resistomes and their
	implications for seafood safety
	Prof. Xiang-dong Li
11:15-11:35 am	Title: Electrochemical Immunosensing for Marine Analytes Large and Small
	Mr. Stuart Robertson
	(PI: Prof. Minhua Shao)
11:35-11:55 am	Title: Electrochemical Immunosensing for Marine Analytes Large and Small
	Mr. Stuart Robertson
	(PI: Prof. Minhua Shao)
11:55 am-12:15 pm	Title: Quantifying impact of dispersion and transport of passive and active tracers
1	Prof. Julian Mak
12:15-1:25 pm	Lunch break
1:25-1:45 pm	Title: Development of a suite of novel in vitro assays for screening of epigenetic
1	modifiers
	Dr. Cherry C.T. Leung
	(PI: Prof. Rudolf Shiu Sun Wu)
1:45-2:05 pm	Title: Bathymetric suppression on turbulent volume transfer across buoyant shelf
1	circulations
	Mr. Huaiyu Wei
	(PI: Prof. Yan Wang)
2:05-2:25 pm	Title: Stable isotope analyses for coral reef impact assessments
	Dr. Christina Skinner (Video)
	(PI: Prof. Alex S.J. Wyatt)
2:25-2:45 pm	Title: A Covid-19 Side Effect: Massive Release of Microplastics from Discarded
1	Surgical Masks Potentially Polluting Marine Environment
	Prof. Henry Yuhe He
2:45-3:05 pm	Title: Advancing Bioanalytical Approaches to Understanding Health Impacts of
1	Chemical Mixtures in Marine Wildlife
	Prof. Ling Jin
3:05-3:20 pm	Break
3:20-3:40 pm	Title: Studying wild fish bacterial pathogens in Eastern Mediterranean fish by
1	applying next generation sequencing on gill tissue
	Peleg Itai
	(PI: Dr. Danny Morick)
3:40-4:00 pm	Title: Emerging contaminant concentrations, sediment interaction and risk
	management in the Pearl River Estuary and Southampton Water
	Jana Appelt
	(PI: Prof. Andy Cundy)
4:00 pm onwards	Area 2 Group Discussion
o pin onwards	The Property Property Control of the Property Control